DOCUMENT RESUME

ED 329 897 CS 010 446

AUTHOR Durkin, Pia M.
TITLE Vocabulary Acquisition in Context Reconsidered: The Effect of Word Type and Exposure Level on the Learning of Unknown Words.
PUB DATE Nov 91
NOTE 8p.; Paper presented at the Annual Meeting of the National Reading Conference (40th, Miami, FL, November 27-December 1, 1990).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Analysis of Variance; Context Clues; *Definitions; Grade 5; Intermediate Grades; Reading Comprehension; Reading Skills; Vocabulary; *Vocabulary Skills; Word Recognition

ABSTRACT

A study examined the effects of word type and frequency of exposure on the incidental learning of unknown words in context. A target word pool of 60 words was selected to ensure unfamiliarity to the subjects, 110 male and female average fifth-grade students attending three private elementary schools in New York City. Students were randomly assigned to one of four conditions: Simple-Synonym (SS) words, one exposure; SS words, 4 exposures; Concept-Challenge (CC) words, 1 exposure; and CC words, 4 exposures. (SS words consisted of unknown words whose concept was known by the students and could be defined by a one-word definition; CC words consisted of words whose concepts were not known but could be taught by using familiar examples.) Two vocabulary measures were administered to assess the students' ability to define the target words. Students were asked: (1) to supply a definition; and (2) to select a definition from a multiple-choice format. Results revealed a main effect for exposure level in which more contextual exposures produced better acquisition of meaning of unknown words than fewer exposures. Results also revealed that more CC words were learned than SS words, which was opposite to the trend expected. Findings suggest that CC words by virtue of their conceptual nature may require a deeper form of processing since they are embedded in more elaborative passages. (One figure and one table containing data are included; one appendix listing sample words is attached.) (KEH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED329897

Paper presented at
The National Reading Conference
Miami Florida 1990

Vocabulary Acquisition in Context Reconsidered: The Effect of Word Type and Exposure Level on the Learning of Unknown Words[1]

Pia M. Durkin, Ph.D
NYC Board of Education - Community School District 13

BEST COPY AVAILABLE

CS010446

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Pia M. Durkin
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
X This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Paper presented at
The National Reading Conference
Miami Florida 1990

Vocabulary Acquisition in Context Reconsidered: The Effect of Word Type and Exposure Level on the Learning of Unknown Words[1]

Pia M. Durkin, Ph.D
NYC Board of Education - Community School District 13

The purpose of this study was to assess the effects of two variables: word type and frequency of exposure on the incidental learning of unknown words in context. Word type, as related to conceptual complexity, which has consistently been cited in the literature (Jenkins & Dixon, 1983) had not been empirically investigated before this study. The frequency with which the students were exposed to the target words within context was either one or four exposures.

Method

Subjects. The subjects were 110 male and female average fifth grade students within three private elementary schools within New York City. All three schools served middle to upper middle class families and were equivalent in SES background.

Materials.

A. Word Selection

A target word pool of 60 words were selected to ensure their unfamiliarity to average fifth graders. The unfamiliarity of these words was validated on students from a similar background to those used in the study. Students were asked to check if they knew the word and guess at its meaning in a prior knowledge verification measure.

Two types of unknown words were validated. As defined by the researcher, Simple-Synonym (SS) words consisted of unknown words whose concept was known by the students and could be defined

CS010446

[1]This research was used to fulfill the dissertation requirements for partial fulfillment of the Ph.D degree granted by New York University

by a one-word definition. Concept-challenge (CC) words consisted of words whose concepts were not known by the student but could be taught by using familiar examples and instances. These words were defined by more than one word. In a procedure used by Nagy, Anderson, and Herman (1987), middle grader teachers were asked to rate the words' for conceptual complexity by judging if the words underlying concept was assumed known by average fifth graders and, if not, how it could best be taught (i.e. through examples or the introduction of additional factual information). Five SS and five CC words were selected through this process (See examples).

Target words were embedded into five-six sentence researcher-constructed passages including examples and information that was familiar to this age group. A multiple-choice question requiring a textually-implicit response followed each passage to ensure attention to the task.

Posttests. Two vocabulary measures were administered to assess the student's ability to define the target words. Students were first asked to supply a definition. Secondly, students were asked to select a definition from a multiple-choice format. As a supplementary measure, a word derivation test was used to determine if students could derive the meaning of the target word when the actual passage was available for reference.

Procedure. All students received the Prior Knowledge Verification measure one month before the actual passage packets were distributed. A 2 (Type of word: SS or CC) x 2 (1 or 4 exposures) factorial design was used. Students were randomly assigned to one of four conditions: SS words, 1 exposure; SS words, 4 exposures; CC words, 1 exposure; CC words, 4 exposures. Posttests were administered immediately after the reading of the passages.

Results

The data for the supply and select measures were each analyzed separately with a 2 x 2 analysis of variance (ANOVA). The means and standard deviations for both measures are presented in Table 1 and Figure 1.

On both the supply and select tests, there was a significant main effect for exposure ($F= 4.55$, $p\leq.001$ - supply; $F= 5.93$. $p\leq.05$ - select) in that the four-exposure group averaged better meaning acquisition than the one-exposure group. On both measures, there was no significant effect due to word type. Though not significant, it was interesting to find that students generally learned more CC words than SS words. However, on the word derivation test, there was a significant main effect for word type ($F= 7.02$, $p\leq.01$) in that students were able to derive more SS words than CC words.

Discussion

Minimal gains in word acquisition were found consistent with Nagy et al.'s study (1987). This may have been due to the brevity and format of the passages. There was a main effect for exposure level in that more contextual exposures produced better acquisition of meaning of unknown words than fewer exposures. More CC words, though not significant, were learned than SS words which was opposite to the trend expected. The CC words by virtue of their conceptual nature may have required a deeper form of processing since they were embedded in more elaborative passages. In the word derivation measure, though supplementary to the study, students derived more SS words than CC words. This confirms the use of the constraint-seeking strategy found as a critical component of the relationship between the unknown word and the surrounding context (McKeown, 1985). Because of their one-word definitional aspect, SS words allowed students to use this strategy more easily.

The use of a word-type model (Jenkins & Dixon, 1983) based on conceptual complexity is therefore questioned as it relates to the incidental learning of unknown words in context. Based on the findings of this study, the model has served no differentiating purpose. This research suggests that the ease with which a concept can be built through context may offer an alternative explanation to vocabulary acquisition rather than the total lack of conceptual knowledge of a particular unknown word.

WORD TYPE

Simple Synonym (SS) Words

1. enigma - mystery
2. apparatus - tool
3. allotment - portion
4. altercation - fight
5. stipend - salary

Concept Challenge (CC) Words

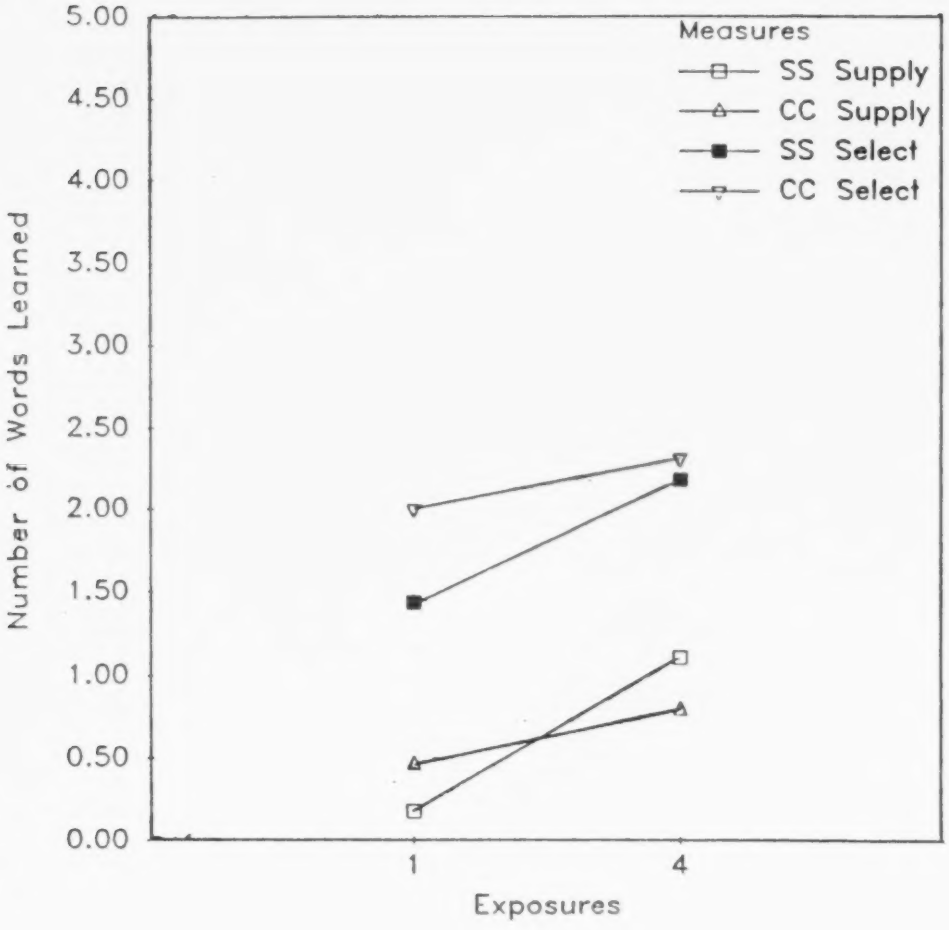
1. amelioration - way of making something better
2. aberration - something different from the normal course of events
3. abeyance - not acting right away
4. apathy - feeling of uninterest
5. travesty - taking an important subject and making it look ridiculous

Table 1

Means (and standard deviations) of Supply and Select Tests

Group	N	Supply Test	Select Test
SS/1 exp	28	.18 (.48)	1.43 (1.07)
SS/4 exp	28	1.11 (1.13)	2.18 (1.22)
CC/1 exp	26	.46 (.71)	2.00 (..98)
CC/4 exp	28	.79 (.99)	2.32 (1.33)

Figure 1



Means of Supply and Select Tests